ECAC WORKING GROUP COMMENTS ON EIS AND HYDROGEOLOGICAL STUDY for 735 Southdale Road West

S. Evans, S. Hall, S. Levin, G. Sankar

Received at ECAC's March, 2023 meeting

SUMMARY

- 1. The development setback from the wetlands is not adequate
- 2. The functioning of the PSW is unclear, is it surface fed/groundwater fed or combination of both.
- 3. Though the water balance on a site level might be maintained using LID measures, the wetland could be drier for longer periods because groundwater recharge will be reduced. A feature-based water balance calculation should be required instead of a site specific water balance.
- 4. Groundwater flows SE towards Communities 4 and 5 impacts are not addressed
- 5. Storm Water Management any pre to post requirements that need to be met at this site? It is not clear from the documents

We are not convinced that the EIS and Hydrogeology work make the case that the LID measures such as trails and plantings between the built-up area and the PSW will bring the post development water balance up to 80% as per minimum standards.

Wetland boundary and buffer (Community 4 and Community 5)

Community 5 is a 0.34 ha Maple Mineral Deciduous Swamp Ecosite (SWD3) located adjacent to the south edge of the Subject Lands. It is unclear if this the total size of the feature or just the part on the subject lands. The entire PSW is much larger. Albeit this PSW was complexed under old rules, it is still protected under the London Plan City Policy and should be protected in situ and not relocated.

We note that the consultant has assessed the boundary of the PSW and has submitted a revision to MNR for their review and approval. Even if the MTE assessment is accepted by MNRF (which may mean the application should be considered premature without MNRF acceptance) the proposal is still for a buffer less than included in the Environmental Management Guidelines.

The boundary should have been staked after a site visit by staff and consultant – it appears line on Figure 6 is not agreed to as of yet. Why was a request sent to the Ministry for a revision prior to staking with the City and UTRCA staff? As well, how did the proponent come up with the boundaries if floral investigations on both features were not done. Page 16 of the EIS states" "Communities 4 and 5 were not inventoried as they are outside of the Legal Parcel."

Further lack of clarity and shortage of data arises from Figure 7. It is unclear where the observer was for the amphibian calls. ECAC found it difficult to match what is shown in Appendix F with Figure 7. For example, it appears for the third survey, the call station was adjacent to the road. Regardless, based on the data collected using the Marsh Monitoring Protocol, Community 5 is very rich based on the calls heard (and despite the noise code 2).

Community 4 was too far away to meet the requirements of the March Monitoring protocol. This community should still be considered Candidate SWH. It may also be terrestrial crayfish habitat based on information on page 19 of the document, however, the site was not surveyed for this EIS.

A full 30 m buffer is not contemplated in the rendering shown in the document. Which is, despite the wording on page 25, not consistent with the EMGs. 30 m is not just "suggested" – it is a minimum. As well, as noted on page 25, "In the case of this development, the buffer area of the North Talbot PSW within the Subject Lands will remain in private ownership."

This is very problematic for monitoring and future maintenance of the features and functions of the adjacent communities, especially as SWH for amphibians. There remains a large number of uncertainties that will only be resolved later, after planning approvals are granted. We cite page 27 of the EIS which states: "A landscape plan for the park space will be provided at a later stage," and page 28 which indicates "LID measures will be developed at detail design." This uncertainty, plus the uncertain location of pedestrian movements, the extent of naturalization of the remaining buffer, ECAC cannot accept the conclusion in the Net Effects Table that there will be no negative impacts to the ecological feature and its function (Community 4 and 5).

Recommendation: There will be a need for strong conditions regarding the Natural Heritage Features in any draft plan and site plan agreement.

Terrestrial Crayfish

A single Terrestrial Crayfish chimney was observed in the 1a inclusion (MAM2) during field investigations [Figure 7]. Two chimneys were also observed along the edge of Community 5 (SWD3). Terrestrial Crayfish could also be present in Community 4 (the south portion of the North Talbot PSW), however this community could not be searched as it is outside the Legal Parcel. However, Community 4 remains Candidate SWH as noted on page 21.

Small wetland community 3

While known it is to be removed and relocated to the property to the South under that plan of subdivision, the statement on page 23 ("It is our opinion that small ponds such as these are not under-represented in London and not biologically important to be considered in this context," should be considered suspect especially when there is city policy to permit the relocation of small wetlands. Also, the 2006 inventory of Regionally Significant Vegetation Communities done by Bergsma and DeYoung indicated that **SAS made up only 0.21% of ecosites in London.**

HydroGeology, Stormwater Management and infiltration

Page 24 – "There are no other drainage features (i.e., municipal or agricultural drains, intermittent streams, headwater streams, manmade or natural ponds) located within or adjacent to the Subject Lands." Really? No natural ponds? What are community 4 and 5?

P. 27, ExP states that infiltration will be maintained in open space and green space areas. How will that happen during construction? Although it is possible that the post construction water balance may reach the 80% minimum, it appears very unlikely that it can be maintained <u>during</u> construction.

Page 28: It is proposed that runoff from impermeable surfaces (ex: rooftops) and infiltration in landscaped areas will contribute to the North Talbot PSW to maintain appropriate surface water levels post-development (EXP, 2022). ECAC is skeptical that this will provide the appropriate surface water levels. The quality will certainly change as run off from the surface parking lot will contain salts and oils. It is certainly unclear how runoff from the rooftops will be directed to the landscaped areas. Recommendation 24 indicates not even directing rooftop water to the PSW until "after the grounds have been vegetated and stable for housing and development adjacent to vegetation, roof leaders should be directed to the streets or nearby stabilized vegetated areas." It is also likely that over the long term, the LID measures will not be maintained by the private owner.

Recommendation: Detail design of the LID and other measures to achieve the water balance noted in EXP must be to the satisfaction of the City and UTRCA Hydrologists.

Stormwater management within the proposed development will include catch basins that direct flow from impervious surfaces (parking lots, rooftops, walkways, patios) offsite to an existing stormwater management (SWM) pond. Infiltration will be maintained in open space and green space areas (EXP, 2022). P.30

On P 31 it is stated that "The proposed development will likely result in increased run-off and decreased infiltration due to the construction of impermeable surfaces. The use of Low Impact Development (LID) strategies and secondary infiltration opportunities are recommended by EXP (2022) to maintain pre-development infiltration volumes and sustain the adjacent PSW. It is proposed that runoff from impermeable surfaces (ex: rooftops) and infiltration in landscaped areas will contribute to the North Talbot PSW to maintain appropriate surface water levels post-development (EXP, 2022). "

Unfortunately, as the EIS defers this to detail design, ECAC is unconvinced that stormwater will be managed in a way that will protect the existing features and functions, let alone provide a net benefit.

ECAC also recommends that there be water quality monitoring requirements that go beyond the usual three years. Recommendation 32 speaks to this issue. ECAC notes this is also left as a matter for later ("detail design") as noted in the EIS on page 34.

The groundwater flows SE from this site to the portions of the PSW to the south.



Construction Impacts

Clearly construction will be within the 30 m buffer. This is unacceptable.

How much excavation and dewatering will be done? Recommendation 21 is a recommendation dealing with sediment control at the discharge point of the dewatering system which comes from the 2021 report of EXP. This seems to suggest that the dewatering system will flow into the PSW. This is not acceptable. Any dewatering from late March to June will have a negative impact on the amphibian breeding in Community 5 which is SWH. Construction will also likely have impacts on groundwater flows causing much drier than natural conditions.

As noted in the document, all the important information as to avoidance of these negative impacts is awaiting detailed design.

There will likely also be additional digging for the sanitary outlet. Where is the hook up to the system? The proposed development will be connected to the future Talbot Village subdivision sanitary outlet to the south. Further details are provided in the Initial Proposal Report (Zelinka Priamo Ltd. et al, 2020. ECAC was not given this document and has not requested it.

Post construction

Snow removal and salting will likely run off into the buffer. There will be a path in the buffer and there will be easy access to the site by dogs off leash unless an off leash site (such as the Alto site on Fanshawe Park Road) is included as a requirement of the site plan

OTHER COMMENTS ON CONSULTANT'S RECOMMENDATIONS IN SECTION 7.0

Rec 3 re invasive species removal – agree

Rec 4 re pathways – the location is significant. If it is in the reduced buffer, it must be as far away from the PSW as possible (i.e. the North side of the buffer)

Rec 5 re property demarcation – more important would be educational signage along the property boundary (as suggested in Recommendation 37) as any of the methods proposed by the consultant will not be a hard barrier to crossing. Crossing of the boundary will take place and make the effort to change behaviours with information about the PSW including permanent signage/ information in common areas of ALL buildings (similar to consultant Recommendation 38).

Recommendation 7 and 10 re the SAS to be relocated are in conflict. As the wetland is to be relocated to the property to the south (agreed to in a plan of subdivision with Southside), the new site MUST be created before the removal and relocation of the species in the SAS. It is not appropriate to remove species to the SWM facility on the other side of the road when it is not known what species and in what quantities are in the SAS nor when the move of any species remaining will be to the recreated wetland. The City must get the timelines right! In addition, Recommendation 10 suggests species in the SAS could be relocated to the Southwest Optimist Stormwater Management Pond and/ or the North Talbot PSW. Do either offer a suitable environment for these species?

Recommendation 11 is agreed to - just depends on when it takes place. The City controls the timing as the wetland is to be removed as part of the road widening.

Based on experience at 905 Sarnia Road, the new location for the wetland must be prepared ahead of time and perhaps as long as a year should pass before species in the SAS are relocated to the new site.

The relocated wetland site should be naturalized with native wetland species and include wildlife habitat features (variable water depths, logs, brush/rock piles, emergent vegetation, bird nesting boxes). Wetland relocation will need to be coordinated with the City of London and the south adjacent landowner.

Recommendation 9 re Terrestrial Crayfish – agree noting it is likely there are other chimneys on the lands adjacent to Community 5 outside of the subject lands.

Recommendation 19 regarding the location of stockpiled soils suggest it will be OK to locate them even closer to the PSW. This should not be permitted and regular inspection by the city must take place to ensure this does not happen.

The following recommendations are commendable but completely unenforceable.

Recommendation 30:

The use of chemical applications (such as commercial fertilizers) in landscaped and grassed areas

should be limited. Consider using heartier grass varieties that require less extensive watering or fertilizers (EXP, 2022).

Recommendation 31:

Limit the use of salts or other additives for ice and snow control on the roadways and parking areas

(EXP, 2022).

Where will the plowed snow from the roads within the complex be stored during the winter as to minimize runoff with potential higher concentration of salt into the PSW?

OTHER

Page 17 – it is continuously frustrating to see landowners subvert the protection of species at risk and their habitat by actions such as these

"Pastures and meadows in adjacent lands previously supported breeding Bobolink [THR] and Eastern Meadowlark [THR] (BioLogic, 1998; AECOM, 2018), but the majority of the adjacent lands have since been transitioned to row crops."